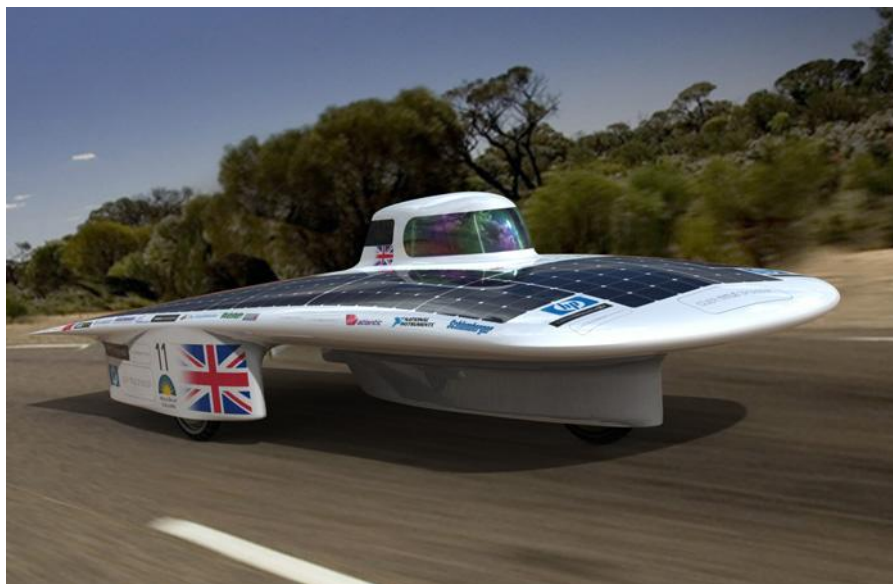


EMBARGO: Please note that this story is embargoed until 00:01 BST on Sunday, April 5th, 2009.

Solar car aims to put rivals in the shade

Cambridge University-designed racing car will use same power as a standard hairdryer



Cambridge University Eco Racing's new solar racing car showcases cutting-edge environmentally-friendly technology, applicable to the next generation of electric vehicles. (Image produced by Lovegrove Studio.)

Plans for a solar-powered racing car which will cruise at 60mph using the same power as a hairdryer have been unveiled by students at Cambridge University.

The car, codenamed "Bethany", will be completed this summer and is being touted as Britain's brightest hope for the World Solar Challenge – a gruelling 3,000 km race across the Australian Outback.

Its power will come from solar energy captured by a 6m² covering of high-efficiency silicon cells. Underneath this solar "skin", however, the car will essentially be an ultra-efficient electric vehicle, which designers say could provide a model for other forms of green transportation.

"At a time when the automotive industry is being forced to look at a low-carbon future, our vehicle demonstrates the enormous potential of energy-efficient electric vehicle technologies," Anthony Law, manager of the student group Cambridge University Eco Racing (CUER), which is building the car, said.

"Transportation currently accounts for about 35% of the UK's energy use, so this is obviously an area in which we can have a big impact on climate change."

Using computer simulation software, the car's aerodynamics, rolling resistance, weight and electrical efficiency have all been optimised to minimise its energy requirements. It will also be fitted with an energy-efficient hub motor, a control system to provide battery management and an electric braking system which generates energy.

It will weigh just 170kg and its creators estimate that it will require up to 50 times less power than a normal petrol-fuelled vehicle.

CUER has already designed the UK's first road-legal solar-powered car, which was driven from Land's End to John O'Groats last year. The new vehicle should be finished in June. It

will then be road-tested extensively before being shipped to Australia for October's World Solar Challenge race from Darwin to Adelaide.

Its creators hope that the innovations in Bethany's design will enable it to put in the best ever performance by a UK-manufactured vehicle, even though the team will be up against university and corporate teams that boast seven-figure budgets, dwarfing the students' own of about £200,000.

Four student drivers will pilot the vehicle across the Outback, working in four-hour shifts to cope with the intense heat, a task that requires months of training. During the race, however, the drivers will only have to steer the car and stay alert, as it will be fitted with an advanced cruise control system which will automatically adjust its speed according to road conditions and weather forecasts.

Some seventy-five students from across the University have been involved in designing or building the vehicle, supported by a network of corporate sponsors, academics and specialist advisors.

The initiative is also one of more than forty supported by the 2009 Fund, which has been set up to support a wide range of University projects in honour of Cambridge's 800th anniversary this year.

CUER sponsorship packages are still available at all levels for the World Solar Challenge. Interested parties should visit www.cuer.co.uk/sponsorship or Email sponsorship@cuer.co.uk to find out more.

-ENDS-

For more information, please contact: Tom Kirk, Communications Office, University of Cambridge, Tel: +44 (0)1223 332300, mobile +44 (0)7917 535815, Email: tdk25@admin.cam.ac.uk

Interviews with members of the CUER team can be arranged on request, via the Office of Communications, University of Cambridge. **Viewings of Affinity**, the first road-legal solar powered car, developed by the same team, can also be arranged on request.

High-resolution images showing computer generated models of the vehicle are available.

Notes for editors:

1. Founded in 2007, Cambridge University Eco-Racing (CUER) has become a complete business and technical enterprise of around seventy-five students in just two years and is supported by a network of corporate sponsors, academics and specialist advisors. CUER aims to promote and develop sustainable technologies and to showcase the UK on the world stage of technological activity. In June 2008 CUER drove its prototype vehicle, 'Affinity', from Lands End to John O'Groats. This was the first time that such a journey had been undertaken and Affinity remains the only solar car to have driven legally on UK roads. For more information visit www.cuer.co.uk

2. Current CUER sponsors include: Cambridge Precision and HP.

3. The World Solar Challenge is a biennial competition in which solar-powered cars race from Darwin to Adelaide, a journey of around 3,000km. The 2009 competition will take place on October 25th to 31st. For more information, visit www.wsc.org.au